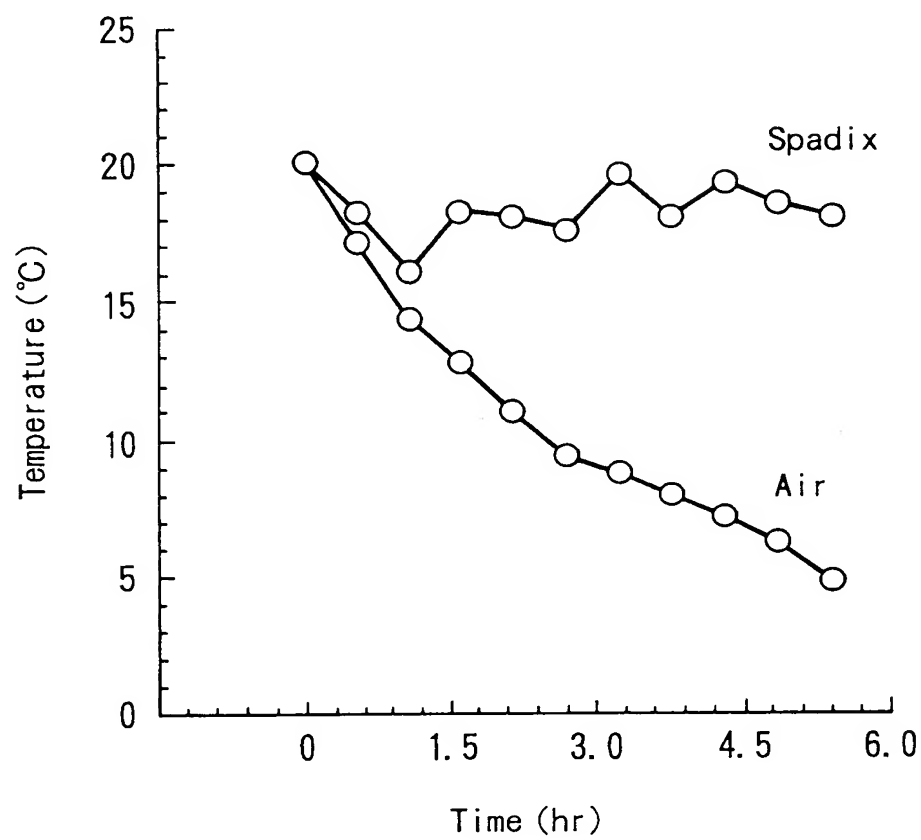


Fig.1



A

Spadix		Leaf	
RT	Cold	RT	Cold

B

Spadix		Leaf	
RT	Cold	RT	Cold

RNA

Spadix		Leaf	
RT	Cold	RT	Cold

Fig.3 Top

I

SfUCPA	1	--MGDHGPRTEISFAGSSR-AAFAACFAELCTI	PLDTAKVRLQLQKKAVTGDV-VALPKY	56
SfUCPB	1	--MGDHGPRTEISFAGSSR-AAFAACFAELCTI	PLDTAKVRLQLQKKAVTGDV-VALPKY	56
StUCP	1	MGGDGGKSDISFAGIFASSAFAACFAEACTI	PLDTAKVRLQLQKKAVEGCG-LALPKY	59
AtPUMP	1	---MVAAGKSDLSLPKTFACSAFAACVGEVCTI	PLDTAKVRLQLQKSAFTLAGDVTLPKY	57
human UCP1	1	-MGGLTASDVHPTLGVQLFSAPIAACLAADVIT	PLDTAKVRLQVQGECP-----TSSVIRY	55
human UCP2	1	-MVGFKATDVPPPTATVKFLGAGTAACIADLIT	PLDTAKVRLQIQGESQGPVRATASAQY	59
human UCP3	1	-MVGLKPSDVPPPTMAVKFLGAGTAACFADLV	PLDTAKVRLQIQGENQ-AVQTARLLVQY	58

II

SfUCPA	57	RGMLGTVATIAREEGLSALWKGI	VPGLHRQCLFGGLRIGLYEPVKSFYVG--DNFVGDIP	114
SfUCPB	57	RGMLGTVATIAREEGLSALWKGI	VPGLHRQCLFGGLRIGLYEPVKSFYVG--DNFVGDIP	114
StUCP	60	RGLLGTGVTIAKEEGLASLWKGI	VPGLHRQCIYGGLRIGHYEPVKNLYVG--KDHVGDVP	117
AtPUMP	58	RGLLGTGVTIAREEGLRSLWKGV	VPGLHRQCLFGGLRIGHYEPVKNLYVFTGKDFVGDVP	117
human UCP1	56	KGVLGTITAVVKTEGRMKLYSGL	PAGLQRQISSASLRIGLYDVTQVEFLTA---GKETAPS	112
human UCP2	60	RGVMGTILTMVRTEGPRSLYNGL	VAGLQRQMSEASVRIGLYDSVKQFYT-----KGSEHAS	115
human UCP3	59	RGVLGTILTMVRTEGPCSPYNGL	VAGLQRQMSEASIRIGLYDSVKQVYTF-----KCADNNS	115

Fig.3 Middle

III

SfUCPA	115	LSKKILAGLTGALAIIVANPTDLVKVRUQSEGLPPG-VPRRYSGALNAY--STIVRKE	171
SfUCPB	115	LSKKILAGLTGALAIIVANPTDLVKVRUQSEGLPPG-VPRRYSGALNAY--STIVRKE	171
StUCP	118	LSKKILAAALTTGALGITIANPTDLVKVRUQAEGKLPAG-VPRRYSGALNAY--STIVRQE	174
AtPUMP	118	LSKKILAGLTGALGIMVANPTDLVKVRUQAEGKLAAG-APRRYSGALNAYFTSTIVRQE	176
human UCP1	113	LGSKILAGLTGCVAVFIGOPTVVVKVRUQAQSHLHG--IKPRYTGTYNAY--RIIATTE	168
human UCP2	116	IGSRLLAGSTGALAVAVAQPTDVVKVRFQAQARAG---GRRYQSTVNAY--KTIAREE	170
human UCP3	116	LTTRILAGCTGAMAVTCACPTDVVKVRFQASIHLPSSDRKYSGMTDAY--RTIAREE	173

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IV

SfUCPA	172	GLGALWTGLGPNLARNAIINAAELASYDQVKQTIKLPGFSDNIFTHILAG--LGAGFFA	229
SfUCPB	172	GLGALWTGLGPNLARNAIINAAELASYDQVKQ-----	203
StUCP	175	GVRALWTGLGPNIGRNAIINAAELASYDQVKEAVLRIPGFTDNVTVHILIAG--LGAGFFA	232
AtPUMP	177	GVRALWTGLGPNVARNAIINAAELASYDQVKETILKIPGFTDNVTVHILSGLFTCAGFFA	236
human UCP1	169	GLTGLWKGTTPNLMRSVIINCTELVTYDLMKEAFVKNNILADOVPCHLVSA--LIAGFCA	226
human UCP2	171	GFRGLWKGTSPNVARNAIIVNCAELVTYDLIKDALLKANLMTDOLPCHFTSA--FGAGFCT	228
human UCP3	174	GVRGLWKGTLPNIMRNAIIVNCAEVVTYDILKEKLDDYHLLTDNFPCHFVSA--FGAGFCA	231

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V

Fig. 3 Down

VI

SfUCPA	230	VCIGSPVDVVKSRMAGDS--AYKSTFDCFIKTLKNDGLLAFYKGFIPNFGRLG--SWNV	285
SfUCPB	204	-----MKSRMAGDS--AYKSTFDCFIKTLKNDGPLAFYKGFIPNFGRLG--SWNV	250
StUCP	233	VCIGSPVDVVKSRMAGDS--AYKNTLDCFVKTLKNDGPLAFYKGFIPNFGRLG--SWNV	288
AtPUMP	237	VCIGSPVDVVKSRMAGDSG--AYKGTIDCFVKTLKSDGPMFAFYKGFIPNFGRLGSFTWNV	295
human UCPI	227	TAMSSPVDVVKTRHINSPPGQYKSVPNCAKVF TNEGPTAF FKGLVP SFLRLG--SWNV	284
human UCPI	229	TVIASPVDVVKTRHMNSALGQYSSAGHCAL TMLQKEGPRAFYKGFMP SFLRLG--SWNV	286
human UCPI	232	TVVASPVDVVKTRHMNSPPGQYFS2LDCMIKMVAQEGPTAFYKGFTP SFLRLG--SWNV	289

	PNBD	
SfUCPA	286 MFLLTLEQVKKFFIKVEVPN-----	303
SfUCPB	251 MFLLTLEQVKKFFIKVEVPN-----	268
StUCP	289 MFLLTLEQAKKFVKSLESP-----	306
AtPUMP	296 MFLLTLEQAKKYVRELDASKRN--	316
human UCP1	285 MFVCFEQLKRELSRSRQTHDCAT	307
human UCP2	289 MFVTIYEQLKRALLMAACTSREAPF	309
human UCP3	290 MFVTIYEQLKRALLMKVQMLRESPP	312

Fig.4

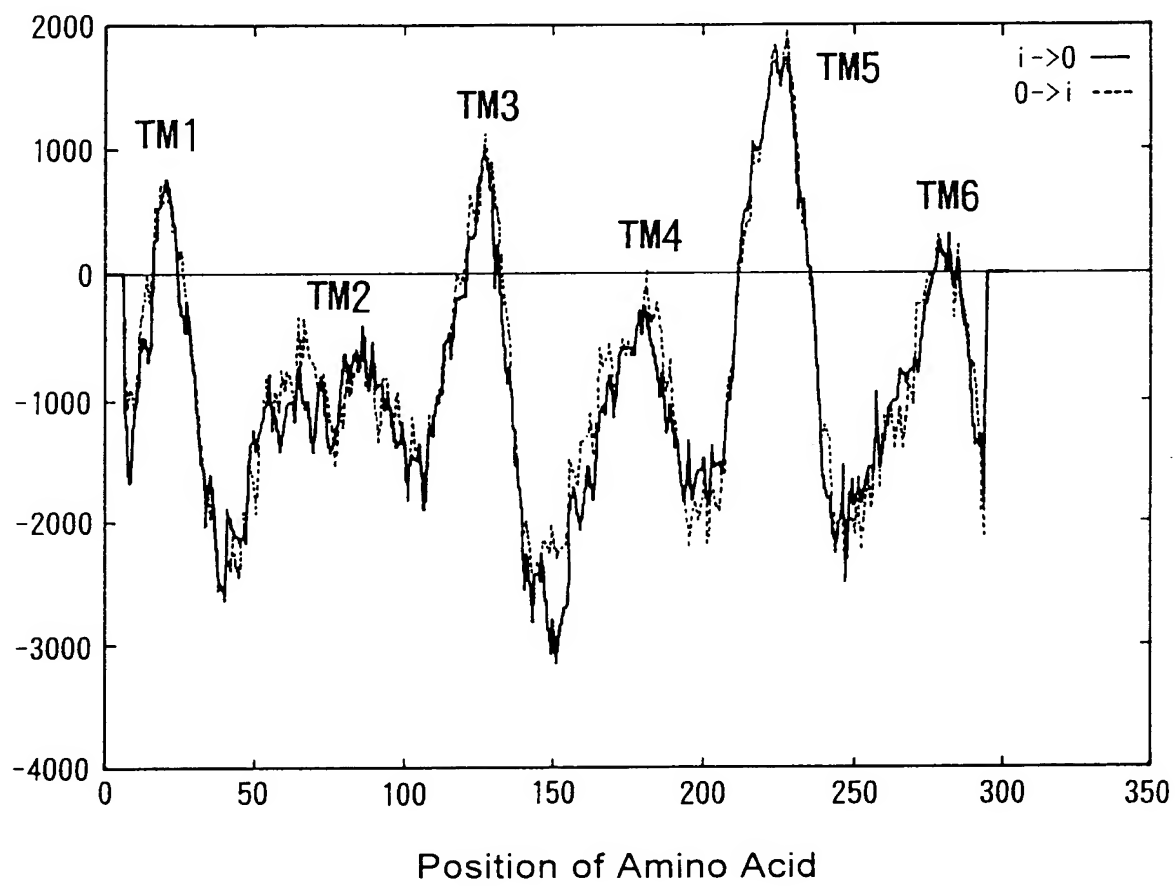


Fig.5

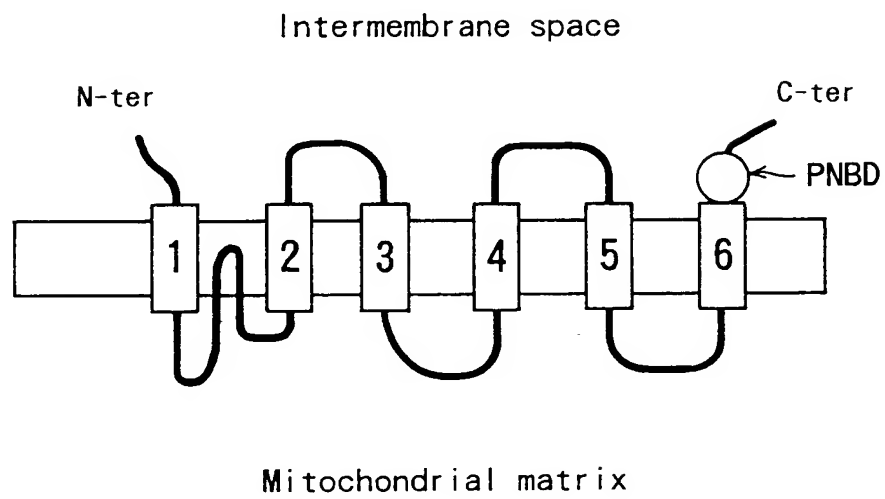


Fig.6

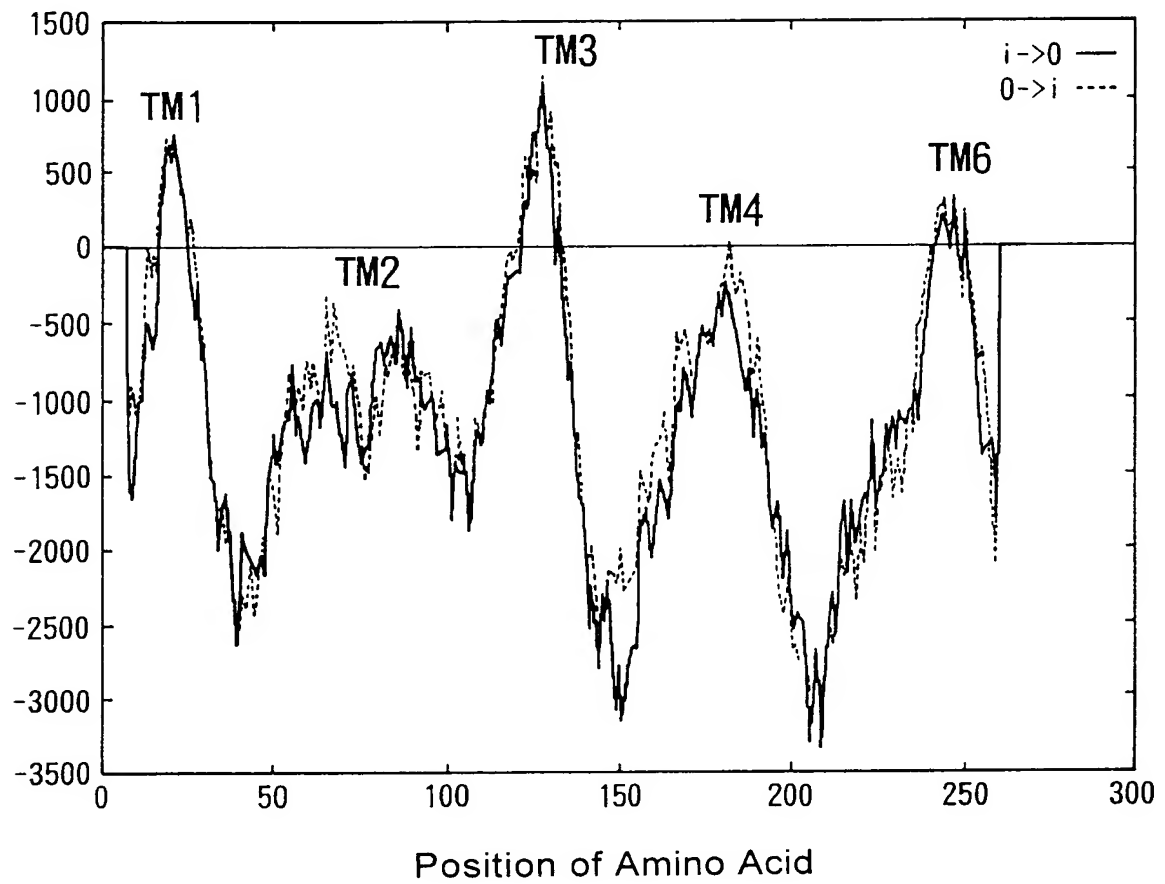


Fig. 7

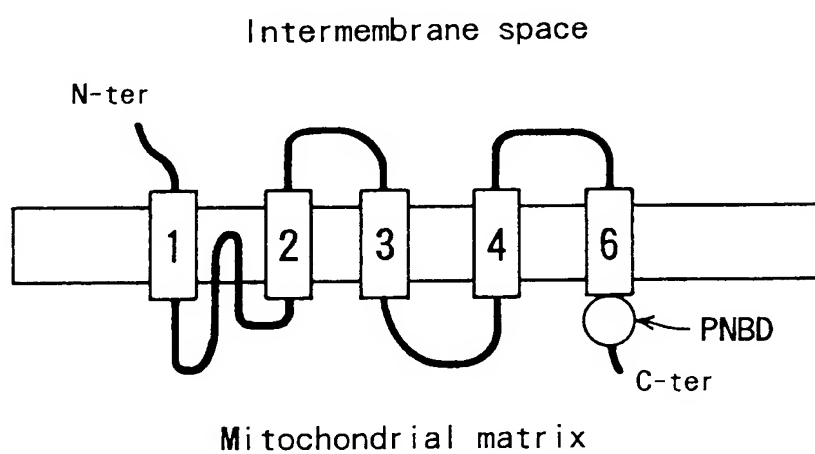


Fig.8

